

III. Remarks**A. Status of the Application**

Claims 1-3, 6-12, 17-20 and 27-29 were previously pending, with claims 27 and 28 having been withdrawn from consideration. Claims 1-3, 6-12, 17-20 and 27-29 have been maintained in their previously pending form. As a result, claims 1-3, 6-12, 17-20 and 27-29 remain pending, with claims 27 and 28 withdrawn from consideration.

Favorable consideration of this application is respectfully requested.

B. Rejections Under 35 U.S.C. §103(a)**1. Claims 1-3, 6-12, 17 and 29**

Claims 1-3, 6-12, 17 and 29 stand rejected under 35 U.S.C. §103(a) over U.S. Patent Application Publication No. 2001/0046699 ("Tajima '699"). This rejection is respectfully traversed.

Claim 1 recites:

A sample arraying/assembling device comprising:

a distributing section which is capable of holding respective solutions containing samples to be distributed, the distributing section comprising a plurality of holding ends arranged in a predetermined matrix; and

a wound body comprising:

one of a plate body and a prism, the one of the plate body and the prism defining a plane surface of the wound body; and

a string-like or thread-like slender foundation member on which samples are to be distributed at distribution intervals of column or line of the matrix, wherein the foundation member is wound around the one of the plate body and the prism in accordance with a winding route so that: portions of the foundation member are arranged on the plane surface of the wound body and are spaced in a parallel relation on the plane surface at winding intervals of the line or column of the matrix; and

respective holding ends of the distributing section can come into contact with the foundation member;

wherein the distributing section distributes the samples on the wound foundation member in distribution positions of the respective samples provided at the distribution intervals along the winding route of the foundation member.

As detailed below, the rejection of claim 1 under 35 U.S.C. §103(a) over Tajima '699 is improper.

As the PTO recognizes in MPEP §2142:

"The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness."

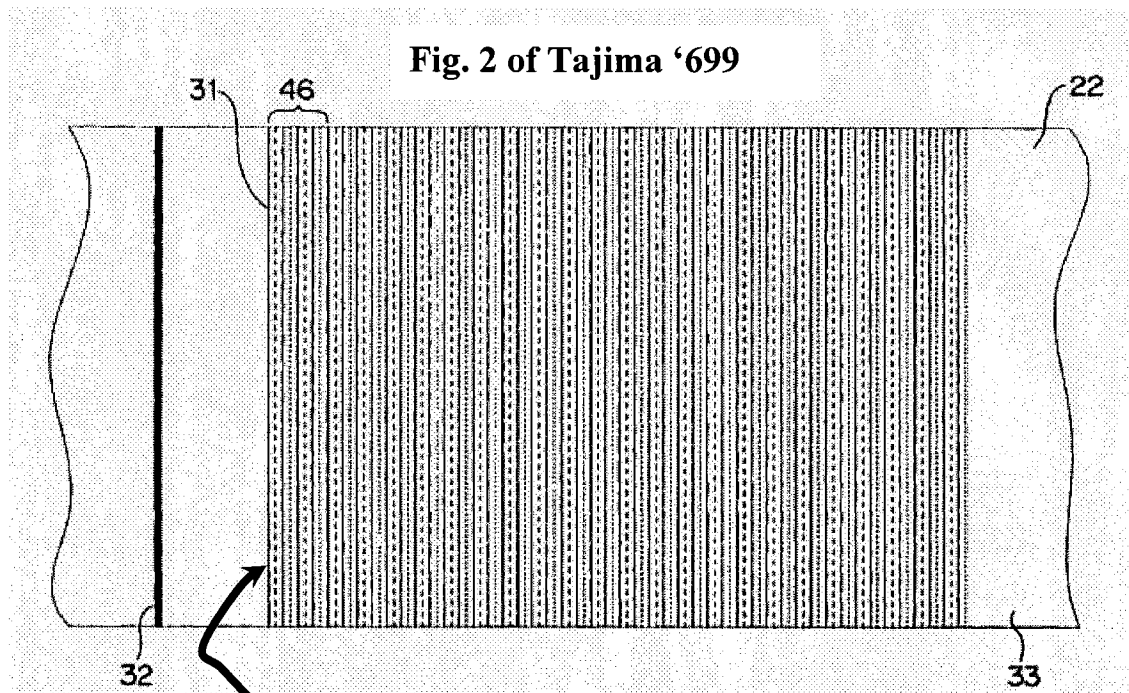
In the present application, the Examiner has not met the burden of factually supporting a *prima facie* case of obviousness of claim 1 under 35 U.S.C. §103(a).

MPEP §2143.03 provides that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)." However, in the present matter, the Examiner has not shown that all the words in claim 1 have been considered. In particular, independent claim 1 recites, *inter alia*, the following elements:

1. a distributing section, wherein the distributing section distributes samples on a wound foundation member in distribution positions of the respective samples provided at the distribution intervals along the winding route of the foundation member;
2. portions of the foundation member are arranged on a plane surface of a wound body;
3. portions of the foundation member are spaced in a parallel relation on the plane surface at winding intervals of the line or column of a matrix; and
4. one of a plate body and a prism, the one of the plate body and the prism defining the plane surface of the wound body.

Applicants respectfully submit that Tajima '699 fails to disclose at least the above-identified four (4) elements of independent claim 1.

With respect to the first element of claim 1 listed above, Tajima '699 discloses a spiral disk shaped carrier 70 for substance detection which is manufactured by dispensing a plurality of parallel lines 31 (of a variety suspensions which contain substances) on an unwound piece of film 22; as a result, the lines 31 (and thus the substances) are spaced along the longitudinal length of the unwound film 22 (See Tajima '699, Fig. 2 and paragraphs [0097]—[0100]). Fig. 2 of Tajima '699 is reproduced below.

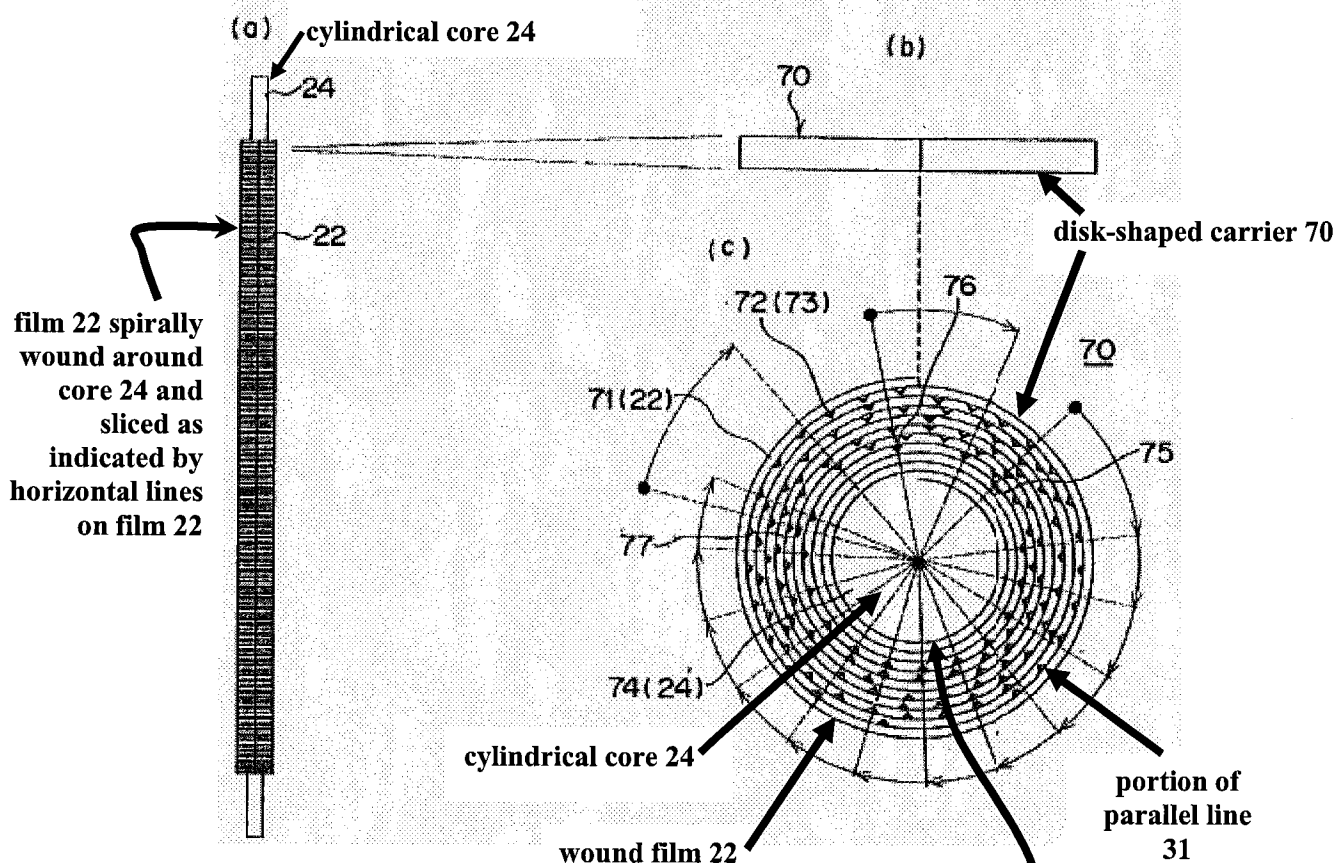


parallel lines 31 spaced in a parallel relation along the longitudinal length of unwound film 22—in contrast to claim 1, the substances are distributed on unwound film, rather than being distributed on wound film as required by claim 1.

Contrary to the subject matter of independent claim 1, however, Tajima '699 does not disclose a distributing section that distributes the substances on the wound film 22 in distribution positions of the respective substances provided at the distribution intervals along the winding route of the film 22, as required by claim 1. Instead, Tajima '699 discloses that the substances are distributed on the unwound film 22, as clearly shown above in Fig. 2 of Tajima '699.

With respect to the second element of claim 1 listed above, Tajima '699 discloses that, after the substances have been distributed on the unwound film 22, the film 22 is then spirally wound about a cylindrical core 24, and then a thin slice is cut in a direction perpendicular to the longitudinally-extending axis of the cylindrical core 24 to thereby form the carrier 70 (See Tajima '669, Fig. 7 and paragraphs [0109]—[0111]). As a result, as shown in Fig. 7 of Tajima '699, a portion of the film 22 is spirally wound around the circumferentially-extending surface of a portion of the cylindrical core 24. Fig. 7 of Tajima '699 is reproduced below.

Fig. 7 of Tajima '699



In contrast to claim 1, a portion of the film 22 is arranged on the circumferentially-extending curved surface of the cylindrical core 24, rather than on a plane surface.

Contrary to the subject matter of claim 1, however, Tajima '699 does not disclose that the film 22 is wound around the cylindrical core 24 so that portions of the film 22 are arranged on a plane surface defined by one of a plate body and a prism. Instead, the film 22 is spirally wound around the cylindrical core 24 and thus a portion of the film 22 is arranged on the circumferentially-extending curved surface defined by the cylindrical core 24, as clearly shown above in Fig. 7 of Tajima '699.

With respect to the third element of claim 1 listed above, since Tajima '699 does not disclose that portions of the film 22 are arranged on a plane surface, it clearly follows that Tajima '699 also does not disclose that the portions of the film 22 are spaced in a parallel relation on a plane surface, which is defined by one of a plate body and a prism, at winding intervals of the line or column of a matrix. Instead, the film 22 is spirally wound and thus portions of the film 22 are spaced in a radial relation each other, rather than being spaced in a parallel relation on a plane surface, as required by claim 1.

With respect to the fourth element of claim 1 listed above, Tajima '699 discloses a cylindrical core 24, as clearly shown above in Fig. 7 of Tajima '699.

Contrary to the subject matter of claim 1, however, Tajima '699 does not disclose one of a plate body and a prism, the one of the plate body and the prism defining the plane surface (on which portions of the film 22 must be arranged in a parallel relation). The Examiner confirms that Tajima '699 does not disclose a prism (*See* Office Action mailed October 14, 2010, page 6, lines 8 and 9). In this regard, the Examiner alleges that

"[i]t is well known in the art and the field of geometry of prism shapes having many edges that form a disk-like shape such as a decagonal prism. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the disk shaped rolled film of Tajima similarly as the prism wound body of the instant claims."

(*Id.* at page 6, lines 9-13).

Applicants respectfully note that it is not appropriate for the Examiner to take official notice of facts without citing a prior art reference where the facts are asserted to be well known are not capable of instant and unquestionable demonstration as being well-known (*See, e.g.,* MPEP 2144.03 and *In re Ahlert*, 424 F.2d at 1091). Applicants therefore respectfully request that the Examiner either: (1) demonstrate that, at the time of the invention, providing one of a plate body and a prism, the one of the plate body and the prism defining a plane surface on which portions of a foundation member (having samples) are arranged and spaced in a parallel relation, is capable of instant and unquestionable demonstration; or (2) provide a declaration pursuant to 37 C.F.R. § 1.104(d)(2) that details the personal knowledge of the Examiner as to providing, at the time of the invention, one of a plate body and a prism, the one of the plate body and the prism defining a plane surface on which portions of a foundation member (having samples) are arranged and spaced in a parallel relation. In the absence of some documentary evidence supporting the Examiner's conclusory statement regarding the capabilities of one of ordinary skill in the art, the rejection of claims 1-3, 6-12, 17 and 29 under 35 U.S.C. §103(a) is improper and should be withdrawn.

Since Tajima '699 does not disclose at least the four (4) elements of claim 1 listed above, it is apparent that the rejection of claim 1 under 35 U.S.C. §103(a) over Tajima '699 is improper. There is also no reason to modify the disclosure of Tajima '699 to provide the device of claim 1. Therefore, claim 1 is allowable over Tajima '699.

Claims 2, 3, 7-12 and 29 depend upon and include the subject matter of claim 1 and therefore are allowable for at least the same reasons as noted above with respect to claim 1.

Claim 6 recites:

A sample arraying/assembling device according to any one of claim 1 through claim 3, wherein said distributing section has a plurality of holding ends projecting to the bottom side of a rectangular board, and arranged in said predetermined matrix.

Claim 6 depends upon and includes the subject matter of claim 1 and therefore is allowable for at least the same reasons as noted above with respect to claim 1.

Regarding claim 6, the Examiner asserts that Tajima '699 discloses "positioning dispensers (12 and 14, or 37 and 39 of Fig. 1)" and that "[t]he dispensers have nozzles (13, or 36 and 38 of Fig. 1) for dispensing samples." (Office Action mailed October 14, 2010, page 6, lines 15-17).

Contrary to the subject matter of claim 6, however, none of the pluralities of nozzles shown in Fig. 1 of Tajima '699 is arranged in a predetermined matrix, which matrix corresponds to the **winding** intervals of a foundation member and thus the parallel spacing of the portions of the foundation member on the plane surface, as required by claim 1. Indeed, the absence of any disclosure of arranging the nozzles in such a matrix is completely consistent with Tajima '699's disclosure of dispensing a plurality of parallel lines 31 (of a variety of suspensions which contain substances) on an **unwound** piece of film 22, as discussed above in connection with claim 1.

For all of the foregoing reasons, it is apparent that the rejection of claim 6 under 35 U.S.C. §103(a) over Tajima '699 is improper. There is also no reason to modify the disclosure of Tajima '699 to provide the device of claim 6. Therefore, claim 6 is allowable over Tajima '699.

Claim 17 recites:

A sample arraying/assembling device comprising:
a distributing section which is capable of holding respective solutions containing samples to be distributed, the distributing section comprising a plurality of holding ends arranged in a predetermined matrix;
a wound body defining a plane surface, the wound body comprising a string-like or thread-like slender foundation member on which samples are to be distributed at distribution intervals of column or line of the matrix, wherein the foundation member is wound in accordance with a winding route so that:
portions of the foundation member are arranged on the plane surface of the wound body and are spaced in a parallel relation on the plane surface at the winding intervals of the line or column of the matrix; and

respective holding ends of the distributing section can come into contact with the foundation member;
a detachably provided core to which one end of said foundation member is attached, and which is to be wound with said foundation member; and
a foundation member rolling section which sequentially takes out said foundation member from said wound body while rolling it up around said core at narrower intervals than said winding intervals; so as to assemble and arrange said foundation member;
wherein the distributing section distributes the samples on the wound foundation member in distribution positions of the respective samples provided at the distribution intervals along the winding route of the foundation member.

As noted above, MPEP §2143.03 provides that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).” However, in the present matter, the Examiner has not shown that all the words in claim 17 have been considered. In particular, independent claim 17 recites, *inter alia*, the following combination of elements:

1. a foundation member wound in accordance with a winding route so that: portions of the foundation member are arranged on a plane surface of a wound body and are spaced in a parallel relation on the plane surface at the winding intervals of the line or column of a matrix, and respective holding ends of a distributing section can come into contact with the foundation member;
2. a distributing section which distributes the samples on the wound foundation member in distribution positions of the respective samples provided at the distribution intervals along the winding route of the foundation member;
3. a foundation member rolling section which sequentially takes out said foundation member from said wound body while rolling it up around a core at narrower intervals than said winding intervals

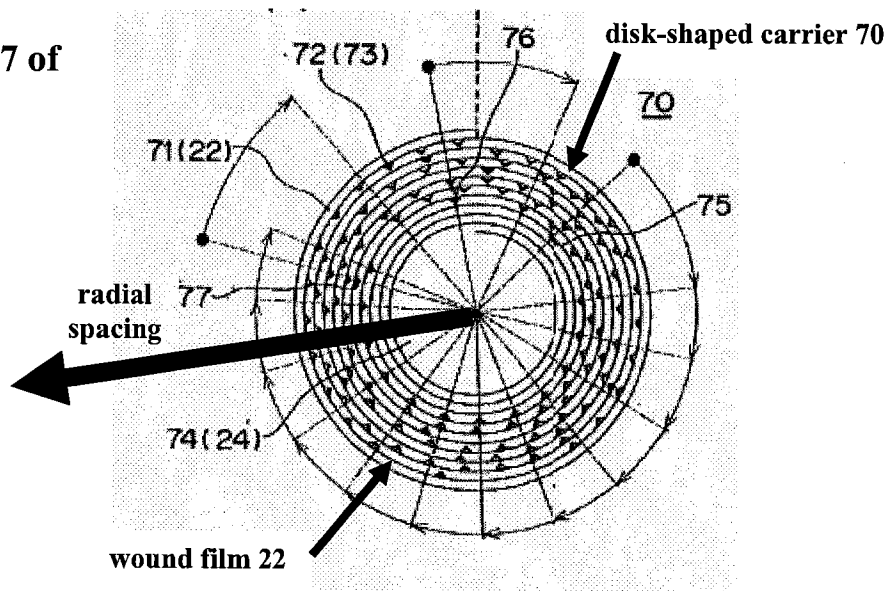
Applicants respectfully submit that Tajima ‘699 fails to disclose at least the above-identified three (3) elements of independent claim 17.

As noted above, Tajima ‘699 discloses a spiral disk shaped carrier 70 for substance detection which is manufactured by dispensing a plurality of parallel lines 31 (of a variety suspensions which contain substances) on an unwound piece of film 22; as a result, the lines 31 (and thus the substances) are spaced along the longitudinal length of the film 22 (*See* Tajima Publication, Figure 2 and paragraphs [0097]—[0100]). The film 22 is spirally wound about a cylindrical core 24, and then a thin slice is cut in a direction perpendicular to the longitudinally-extending axis of the cylindrical core 24 to thereby form the carrier 70 (*See id.* at Fig. 7 and paragraphs [0109]—[0111]). As a result, as shown in Fig. 7 of Tajima ‘699, the film 22 is spirally wound around the circumferentially-extending surface of the cylindrical core 24.

Contrary to the subject matter of claim 17, however, Tajima '699 does not disclose that the film 22 is wound around the cylindrical core 24 so that portions of the film 22 are arranged on a plane surface and are spaced in a parallel relation on the plane surface at winding intervals. Instead, the film 22 is spirally wound around the cylindrical core 24, as shown in Fig. 7 of Tajima '699, a portion of which is reproduced below:

**Portion of Fig. 7 of
Tajima '699**

in contrast to claim 17, portions of wound film 22 are radially spaced on a plane surface, rather than being spaced in a parallel relation on the plane surface.

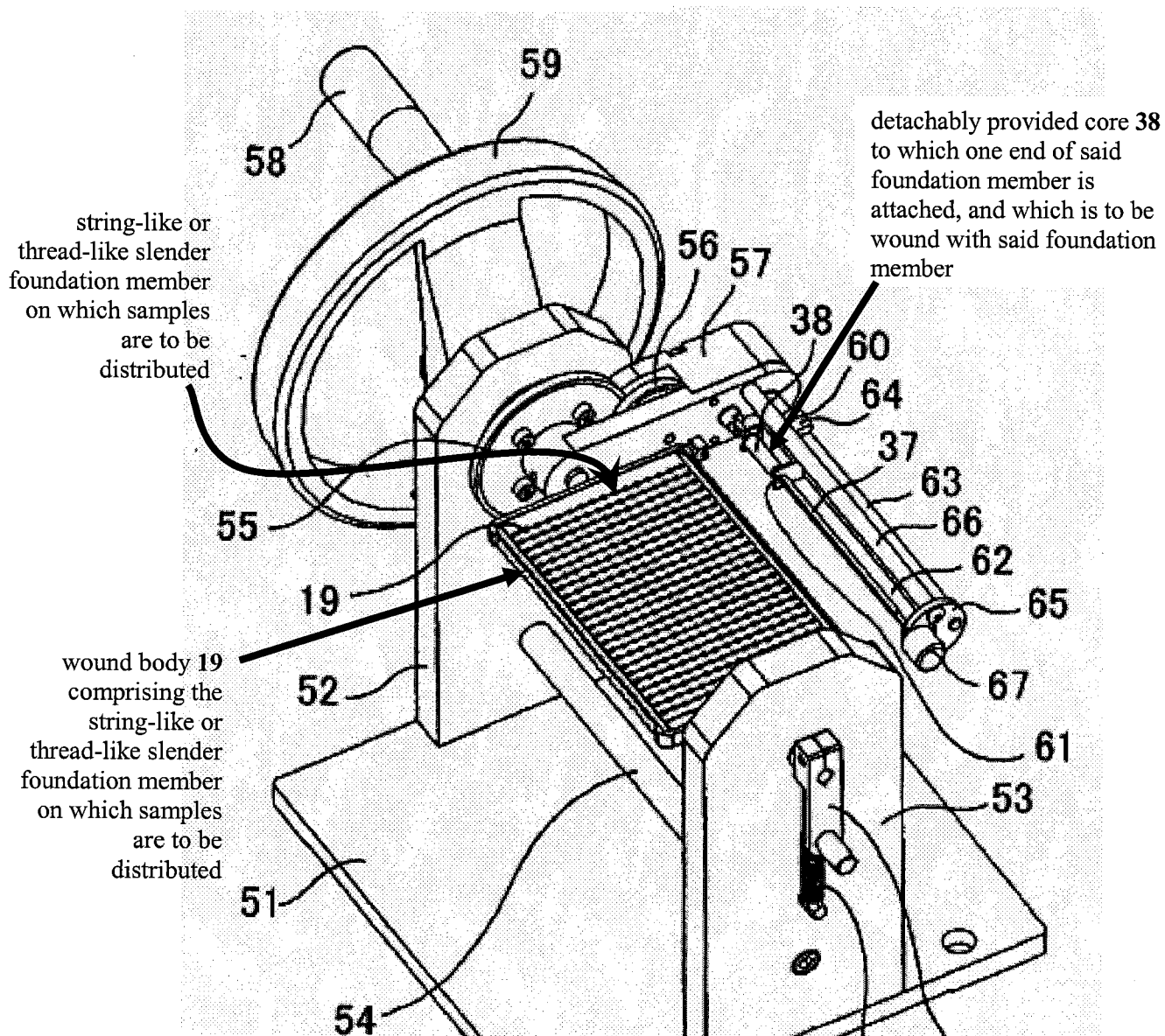


Thus, portions of the film 22 are radially spaced at winding intervals on a plane surface, rather than being spaced in a parallel relation on a plane surface at winding intervals, as required by claim 17.

In further contrast to the subject matter of claim 17, Tajima '699 does not disclose a distributing section that distributes the substances on the wound film 22 in distribution positions of the respective substances provided at the distribution intervals along the winding route of the film 22. Instead, a dispenser 12 distributes suspensions on the unwound film 22 in distribution positions of the respective suspensions provided at distribution intervals along the longitudinal length of the unwound film 22 (See Tajima '699, Figs. 1 and 2 and paragraphs [0088] and [0097]).

In still further contrast to the subject matter of claim 17, Tajima '699 does not disclose a foundation member rolling section which sequentially takes out a foundation member from said wound body while rolling it up around a core at narrower intervals than said winding intervals, as described in paragraph [0147] of the present application and illustrated in Fig. 5 thereof. Fig. 5 of the present application is reproduced below.

Fig. 5 of present application



Instead of disclosing a foundation member rolling section which sequentially takes out a foundation member from said wound body while rolling it up around a core at narrower intervals than said winding intervals, as described in paragraph [0147] of the present application and illustrated in Fig. 5 thereof, Tajima '699 discloses that, once the film 22 is spirally wound around **the cylindrical core 24**, it is not taken out for rolling it up around **another core** at narrower intervals than said winding intervals.

Even if the disk-shaped carrier 70 of Tajima '699 is considered to be the "detachably provided core" of claim 17 (i.e., a core other than the pre-sliced cylindrical core 24), the spiral winding configuration of the film 22 is maintained from the pre-sliced cylindrical core 24 to the disk-shaped carrier 70, rather than being rolled up around the disk-shaped carrier 70 at narrower intervals, as also required by claim 17.

Since Tajima '699 does not disclose at least the three (3) elements of claim 17 listed above, it is apparent that the rejection of claim 17 under 35 U.S.C. §103(a) over Tajima '699 is improper. There is also no reason to modify the disclosure of Tajima '699 to provide the device of claim 17. Therefore, claim 17 is allowable over Tajima '699.

For all of the foregoing reasons, the rejection of claims 1-3, 6-12, 17 and 29 under 35 U.S.C. §103(a) over Tajima '699 should be withdrawn.

2. Claims 18-20

Claims 18-20 stand rejected under 35 U.S.C. §103(a) over Tajima '699, and further in view of U.S. Patent No. 5,895,631 ("Tajima '631"). This rejection is respectfully traversed.

Claim 18 recites:

A sample arraying/assembling method of distributing samples at once at distribution intervals of column and line of a predetermined matrix, on a string-like or thread-like slender foundation member, comprising:
a holding step for holding respective solutions containing samples to be distributed, on a plurality of holding ends arranged in the predetermined matrix;
providing a wound body, comprising:
 providing one of a plate body and a prism, the one of the plate body and the prism defining a plane surface of the wound body; and
 winding the foundation member around the one of the plate body and the prism in accordance with a winding route so that portions of the foundation member are arranged on the plane surface of the wound body and are spaced in a parallel relation on the plane surface at winding intervals of the line or column of the matrix;
a contact step for making said respective holding ends contact with said foundation member; and
distributing the samples on the wound foundation member in distribution positions of the respective samples provided at the distribution intervals along the winding route of the foundation member.

As noted above, MPEP §2143.03 provides that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ

494, 496 (CCPA 1970).” However, in the present matter, the Examiner has not shown that all the words in claim 18 have been considered. In particular, independent claim 18 recites, *inter alia*, the following combination of elements:

1. winding the foundation member around the one of the plate body and the prism in accordance with a winding route so that portions of the foundation member are arranged on the plane surface of the wound body and are spaced in a parallel relation on the plane surface at winding intervals of the line or column of the matrix; and
2. distributing the samples on the wound foundation member in distribution positions of the respective samples provided at the distribution intervals along the winding route of the foundation member.

In particular, and as noted above, Tajima ‘699 discloses dispensing a plurality of parallel lines 31 (of a variety suspensions which contain substances) on an unwound piece of film 22; as a result, the lines 31 (and thus the substances) are spaced along the longitudinal length of the film 22 (See Tajima Publication, Figure 2 and paragraphs [0097]—[0100]). After the substances are dispensed on the unwound film 22, the film 22 is **then** spirally wound about a cylindrical core 24, and then a thin slice is cut in a direction perpendicular to the longitudinally-extending axis of the cylindrical core 24 to thereby form a carrier 70 (See *id.* at Fig. 7 and paragraphs [0109]—[0111]). As a result, as shown in Fig. 7 of Tajima ‘699, the film 22 is spirally wound around the circumferentially-extending surface of the cylindrical core 24.

Contrary to the subject matter of claim 18, however, Tajima ‘699 does not disclose winding the film 22 around the cylindrical core 24 in accordance with a winding route so that portions of the film 22 are arranged on a **plane surface** of the core 24 and are spaced in a **parallel relation** on the plane surface of the core 24 at winding intervals. Instead, the film 22 is spirally wound around the cylindrical core 24, as shown in Fig. 7 of Tajima ‘699. Thus, portions of the film 22 are arranged on the **circumferentially-extending curved outer surface of the cylindrical core 24**, rather than on a **plane surface**, as required by claim 18. And the portions of the film are **radially spaced** at winding intervals, rather than being spaced in a **parallel relation** on a plane surface at winding intervals, as also required by claim 18.

In further contrast to the subject matter of claim 18, Tajima ‘699 does not disclose distributing the substances on the **wound** film 22 in distribution positions of the respective substances provided at the distribution intervals **along the winding route** of the film 22. Instead, the substances are distributed on the **unwound** film 22 and are spaced **along the longitudinal length** of the film 22 (See Tajima ‘699, Figs. 1 and 2 and paragraphs [0088] and [0097]).

The secondary reference, namely Tajima '631, is cited as allegedly disclosing a liquid processing method for using a pipette device to pipette a substance from inside a vessel and transferring the substance to another liquid or target, which the Examiner alleges to encompass the holding and contact steps of claim 18 (*See* Office Action mailed October 14, 2010, page 9). However, Tajima '631 does not supply the above-noted deficiencies of Tajima '699 with respect to claim 18. Therefore, a rejection of claim 18 under 35 U.S.C. §103(a) cannot be supported by the combination of Tajima '699 and Tajima '631. Thus, claim 18 is allowable over Tajima '699 and Tajima '631.

Claims 19 and 20 depend upon and include the subject matter of claim 18 and therefore are allowable for at least the same reasons as noted above with respect to claim 18.

For all of the foregoing reasons, the rejection of claims 18-20 under 35 U.S.C. §103(a) over Tajima '699, and further in view of Tajima '631, should be withdrawn.

C. Conclusion

It is believed that all matters set forth in the Office Action mailed October 14, 2010 have been addressed. Applicants have made a diligent effort to advance the prosecution of this application by submitting arguments in support of the patentability of claims 1-3, 6-12, 17-20 and 29.

In view of all of the above, the allowance of claims 1-3, 6-12, 17-20 and 27-29 is respectfully requested.

The Examiner is invited to call the undersigned at the below-listed telephone number if a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,



Alan N. Herda
Registration No. 50,426

Dated: 12/14/10
HAYNES AND BOONE, LLP
IP Section
2323 Victory Avenue
Suite 700
Dallas, Texas 75219
Telephone: 214/651-5924
IP Facsimile: 214/200-0853
D-1918245